FIG. 3

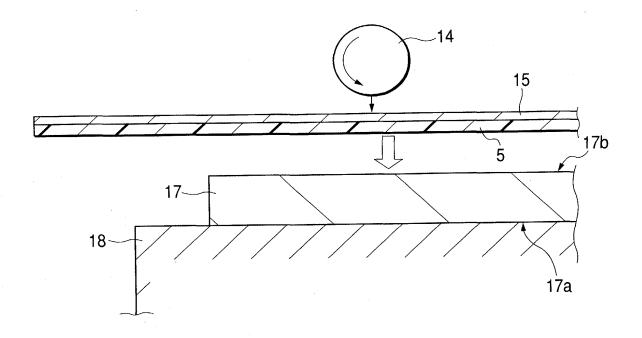
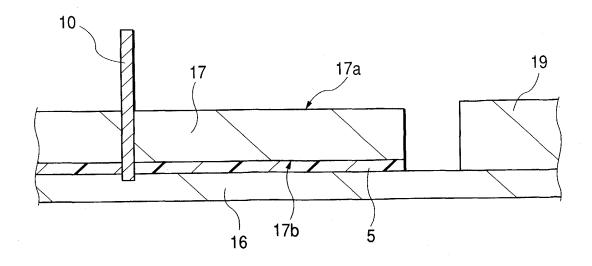


FIG. 4



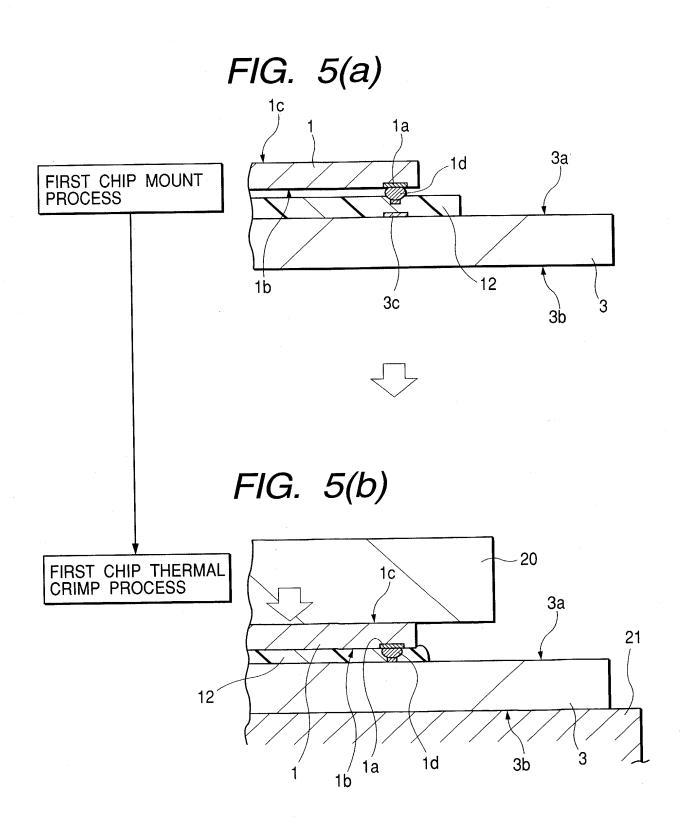
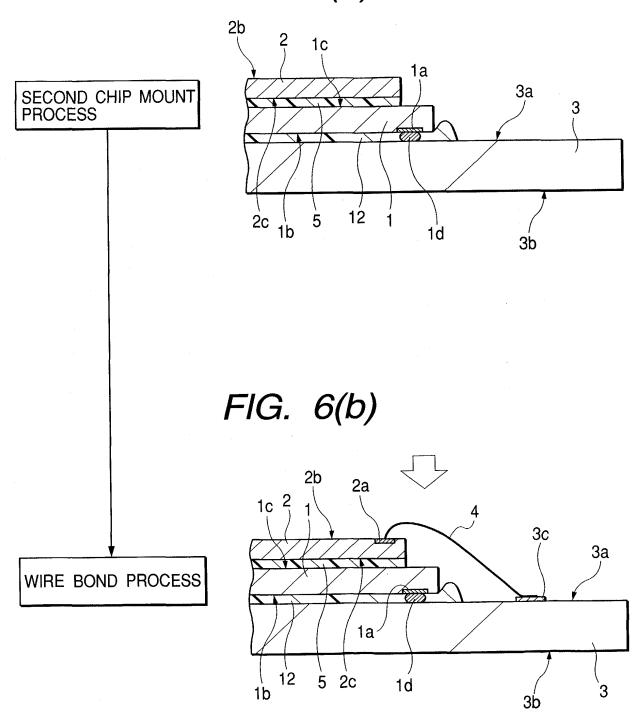
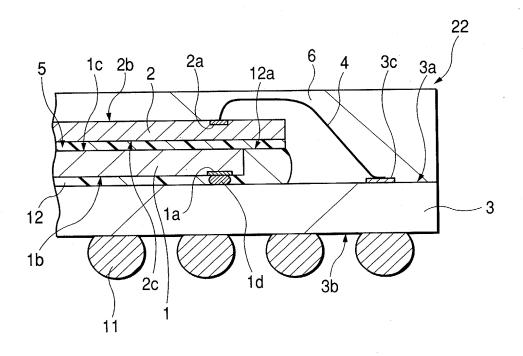


FIG. 6(a)





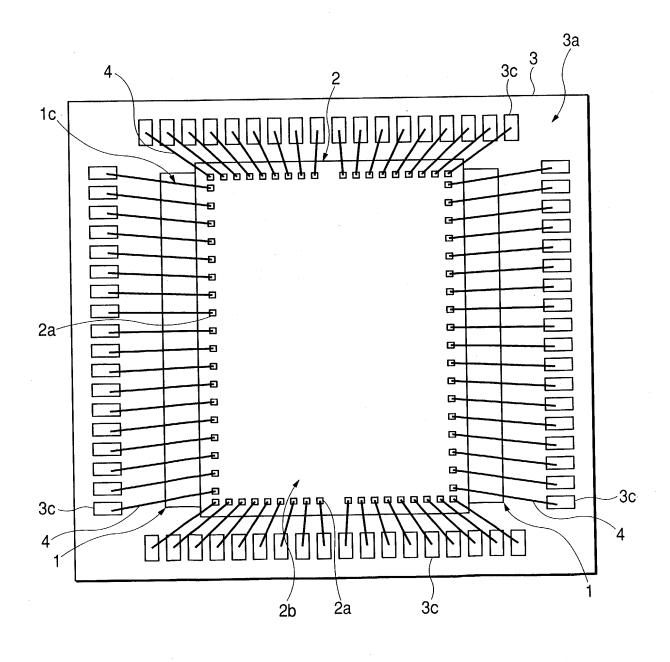
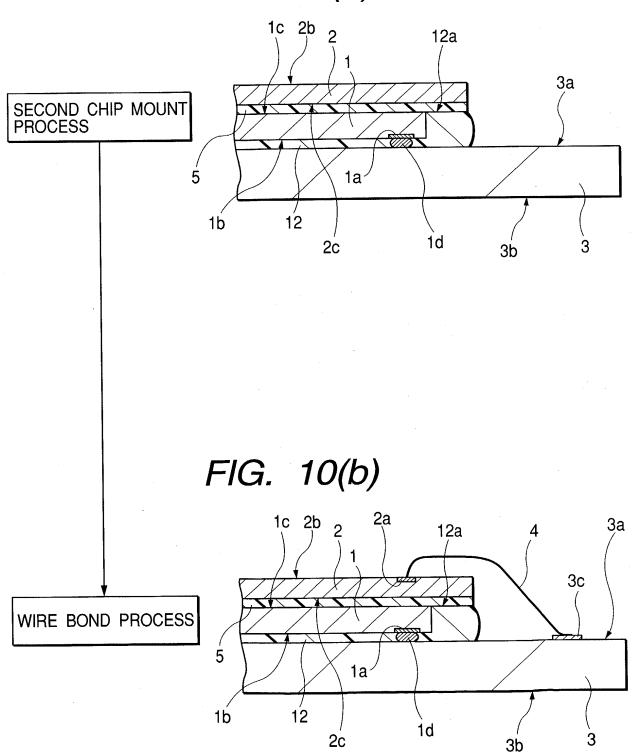
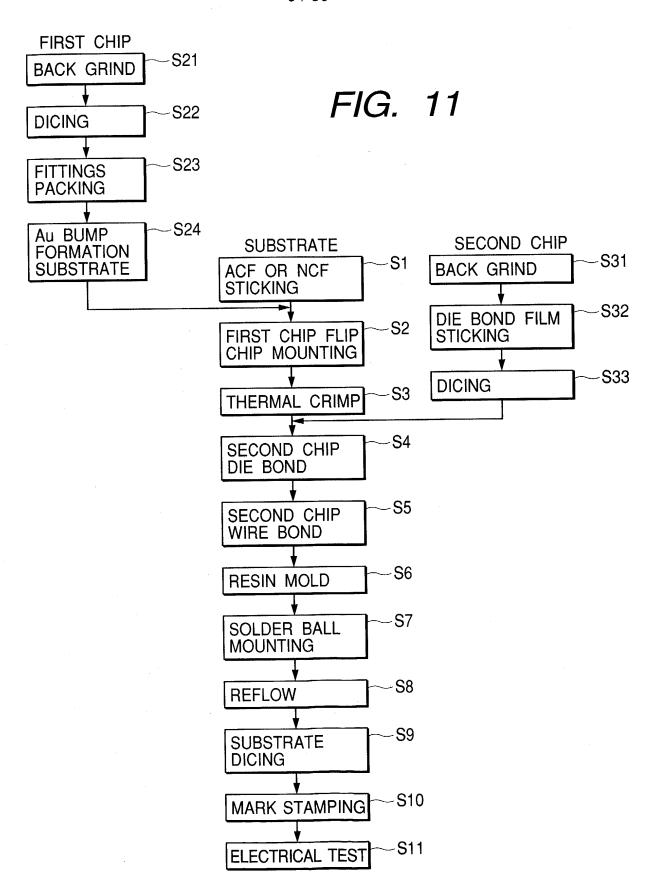


FIG. 9(a) 1a 3<u>a</u> -1d FIRST CHIP MOUNT PROCESS 3c 12 1b 3 FIG. 9(b) - 20 FIRST CHIP THERMAL CRIMP PROCESS .12a 3a 21 3b 1d 1a

FIG. 10(a)





	PROCESS
PROCESS FLOW	NO. PROCESS NAME
1	1 FIRST CHIP
∇	2 BACK GRIND
$\frac{7}{2}$ $\frac{92}{3}$ $\frac{4}{3}$	3 DICING, FITTINGS PACKING
\checkmark $\frac{9}{5}$ $\frac{\sqrt{3}}{5}$	4 BUMP Au WIRE
$68 \nabla \Phi_5$	5 BUMP BONDING
\bigcirc 10 \bigcirc 6	6 EXTERNAL INSPECTION
Q 11 12	7 BUMP BONDING
	8 SUBSTRATE BAKE
	9 CHIP MOUNT RESIN FILM
♦ 15	10 CHIP MOUNT RESIN FILM STICKING
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	11 CHIP MOUNT, CRIMP
Q 17 <u>18</u>	12 SECOND CHIP
Y	13 BACK GRIND
♦ 19 21 ♦ 20 ♥	14 CHIP MOUNT RESIN FILM
	15 CHIP MOUNT RESIN FILM STICKIN
○ 22 <u>23</u>	16 DICING
	17 DIE BOND
Ф24	18 Au WIRE
○ 25	19 WIRE BOND 20 EXTERNAL INSPECTION
♦26	
Q 27	
○ 28	22 MOLD 23 SOLDER BALL
♦29	24 BALL MOUNTING
\bigcirc 30	25 CLEANING
<u> </u>	26 EXTERNAL INSPECTION
\	27 SUBSTRATE DICING
	28 MARK
	29 ELECTRICAL TEST
	30 EXTERNAL INSPECTION
	31 PACKING

FIG. 13

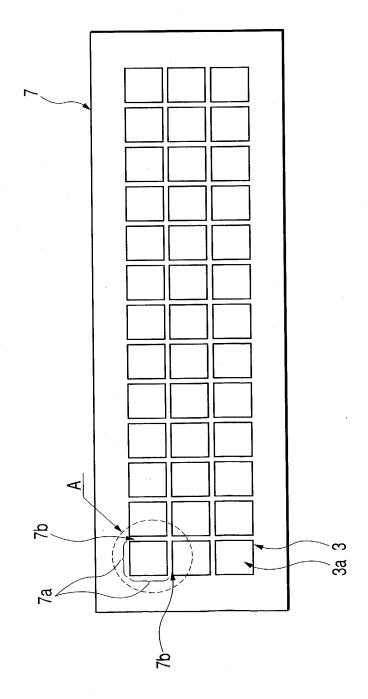
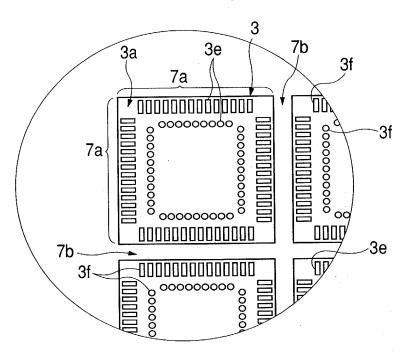


FIG. 14(a)



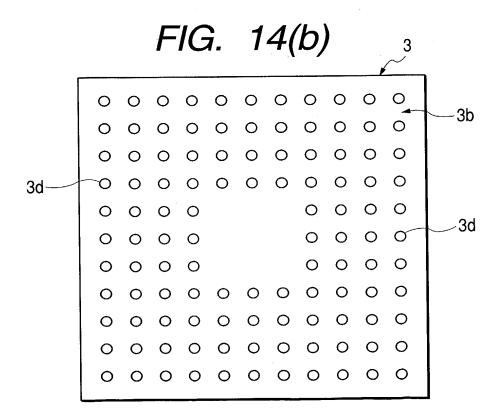


FIG. 15(a)

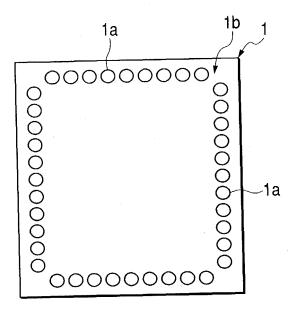


FIG. 15(b)

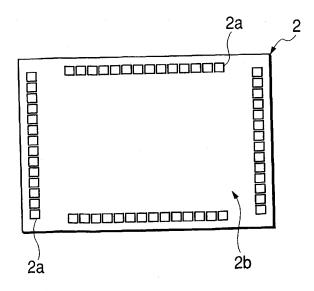


FIG. 16(a)

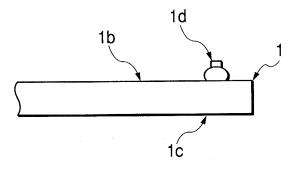
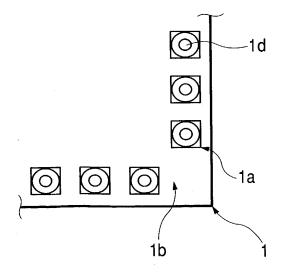


FIG. 16(b)



15/39

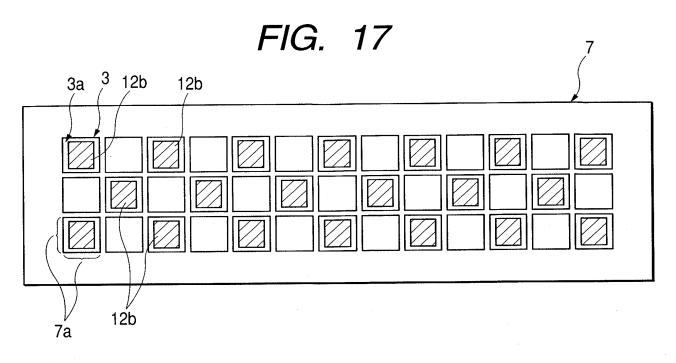


FIG. 18(a)

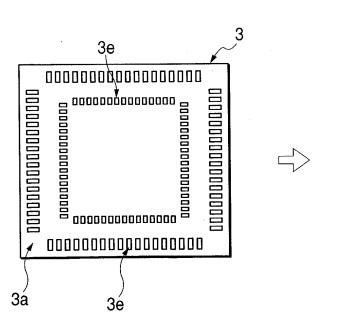
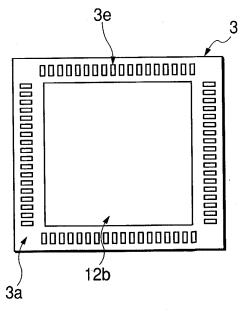


FIG. 18(b)



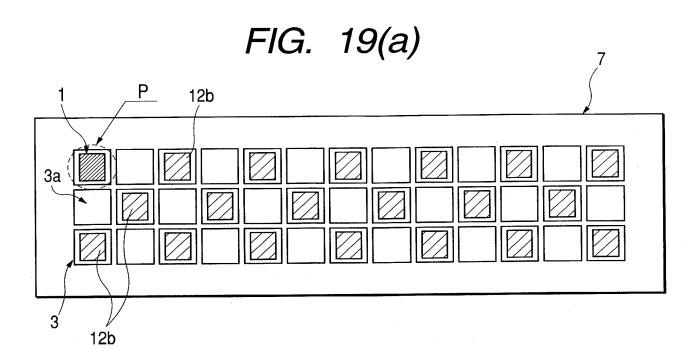


FIG. 19(b)

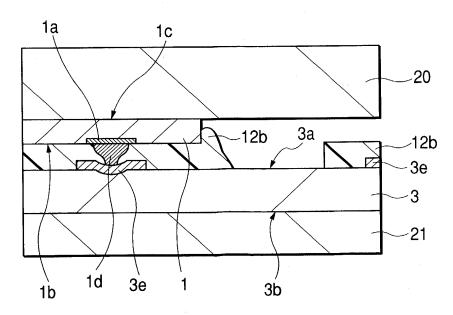


FIG. 20(a)

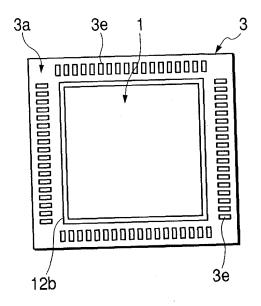
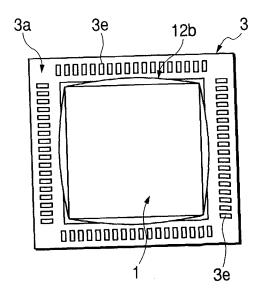
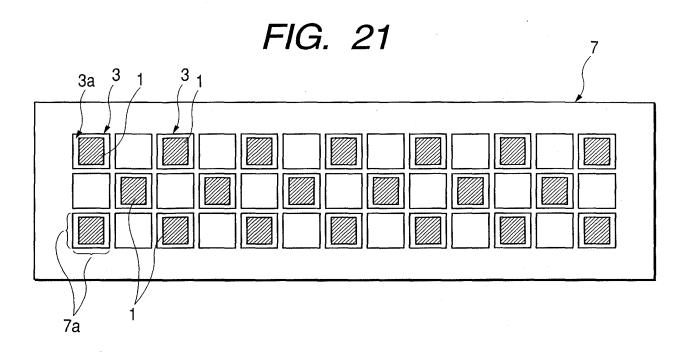
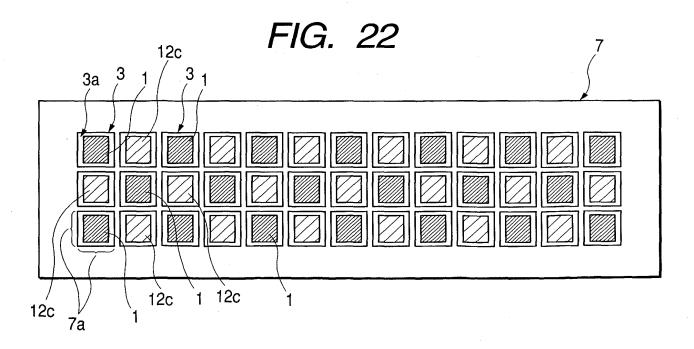
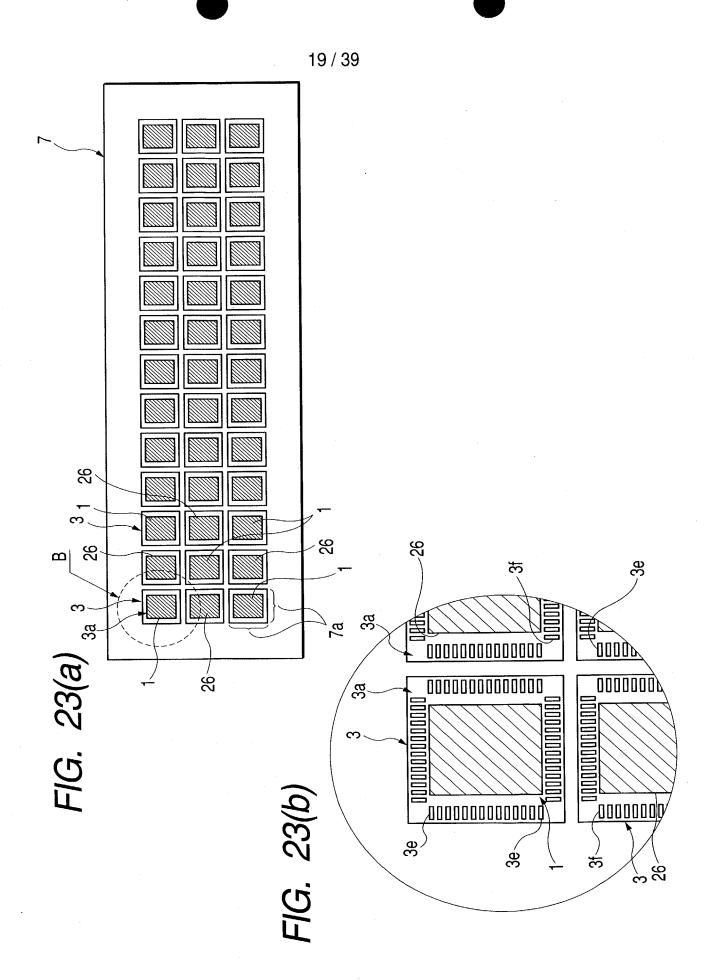


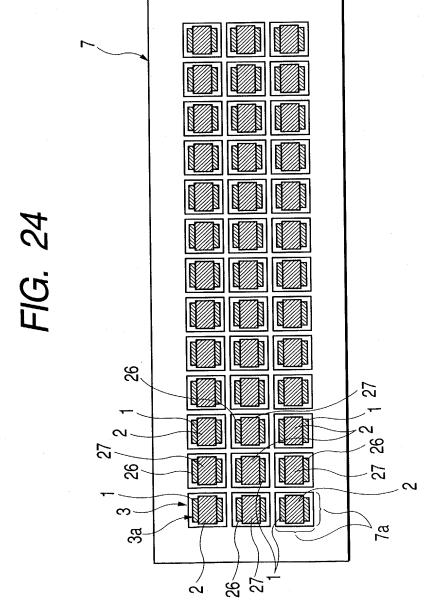
FIG. 20(b)

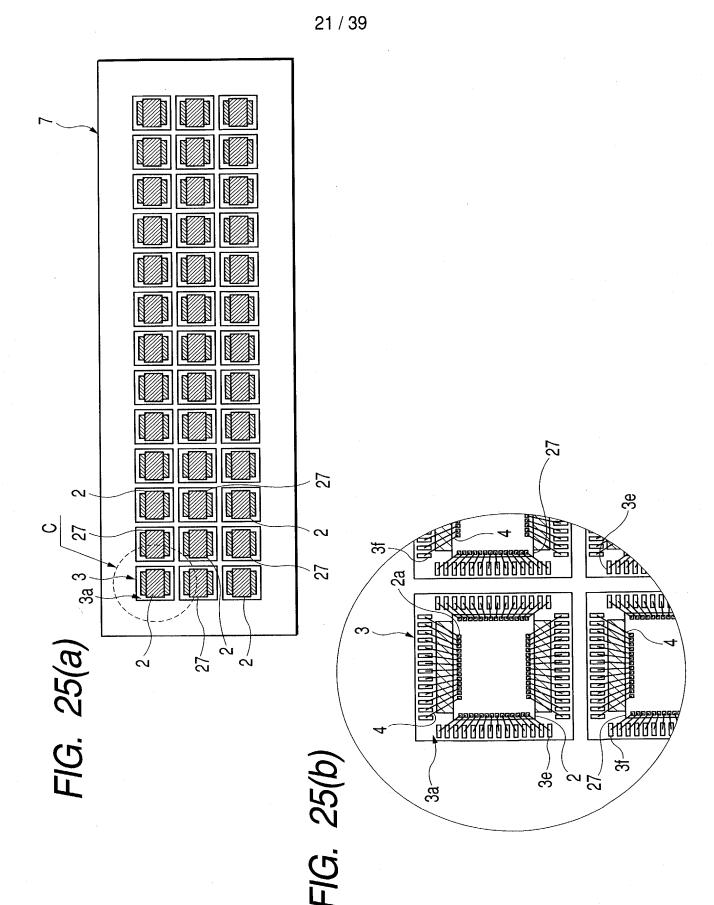












22/39

FIG. 26(a)

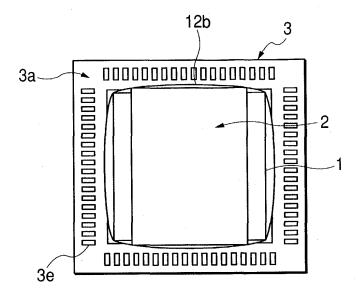
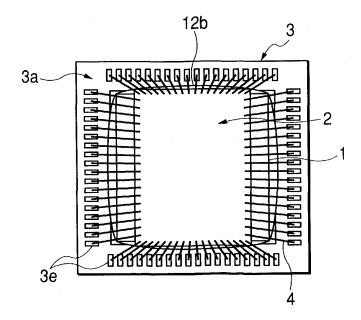


FIG. 26(b)



The second state of the se

The second secon

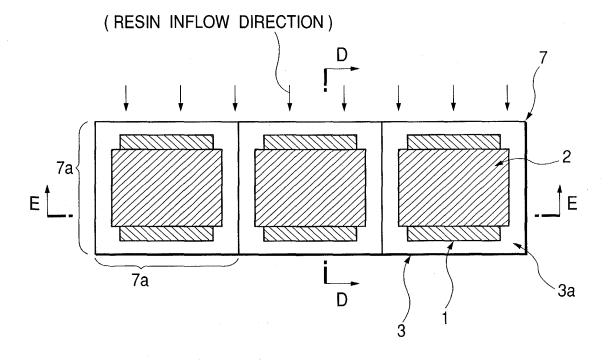


FIG. 29(a)

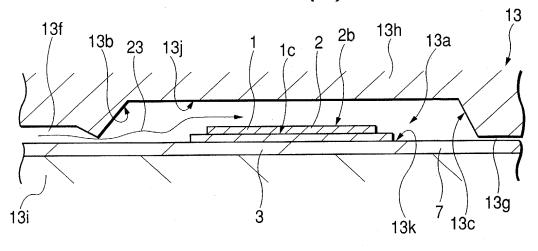
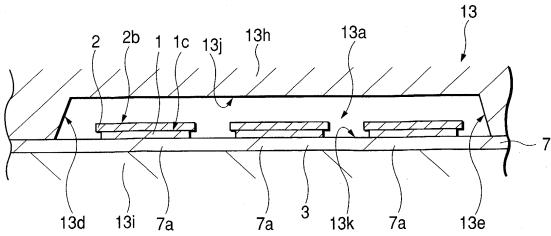


FIG. 29(b)



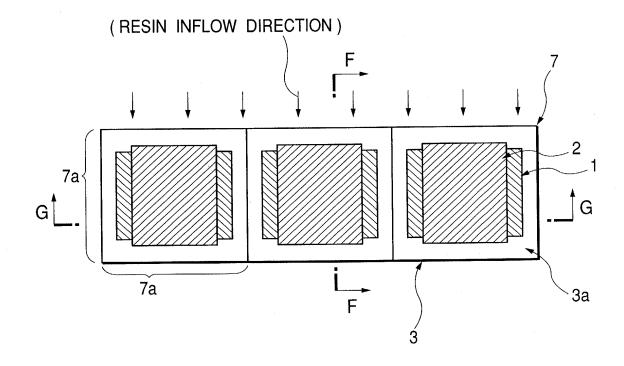


FIG. 31(a)

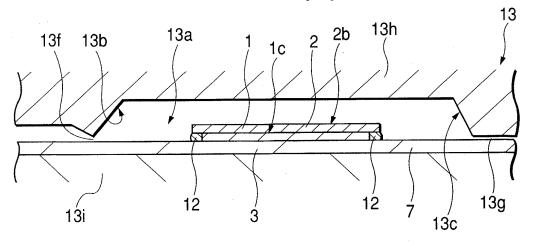
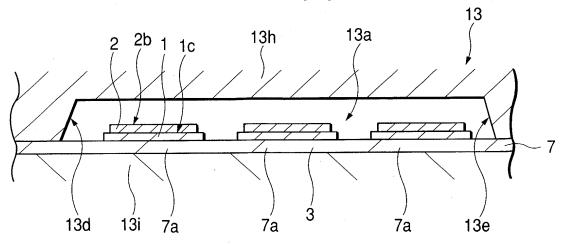
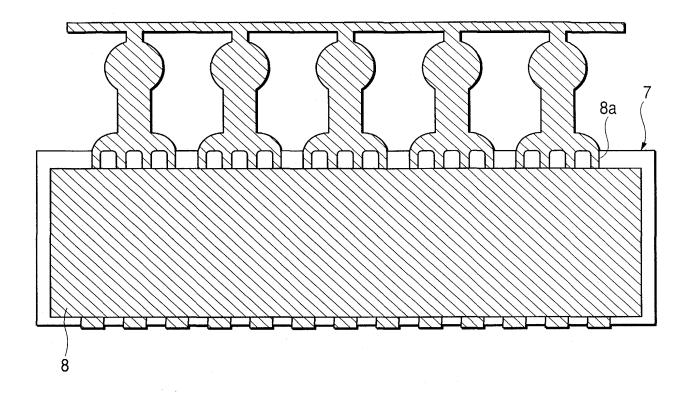


FIG. 31(b)



28 / 39

FIG. 32



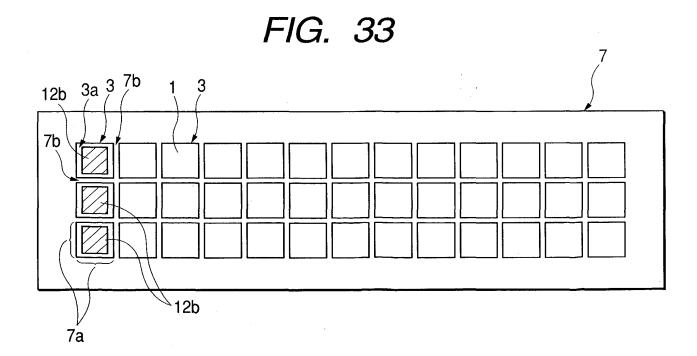
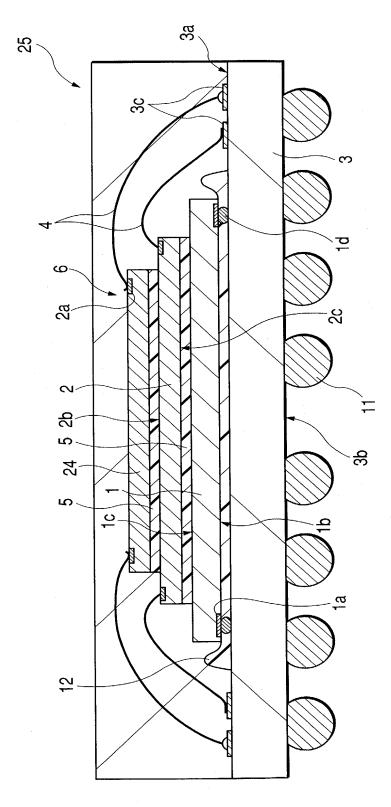
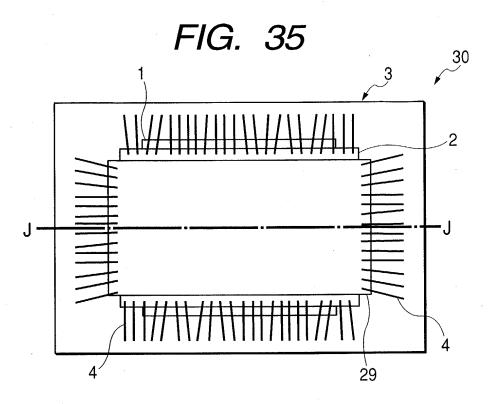


FIG. 34



29 / 39



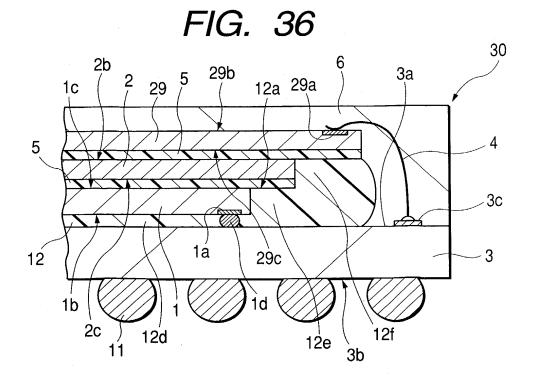


FIG. 37

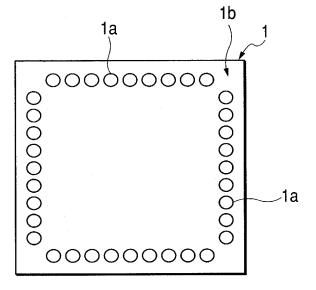


FIG. 38

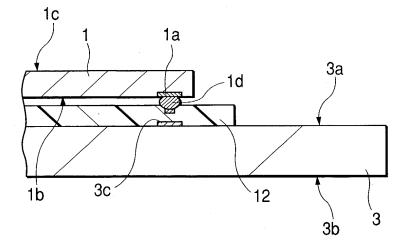


FIG. 39

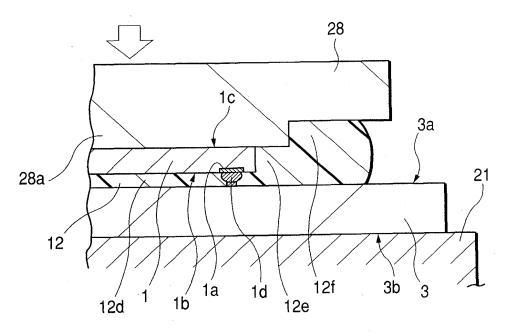


FIG. 40

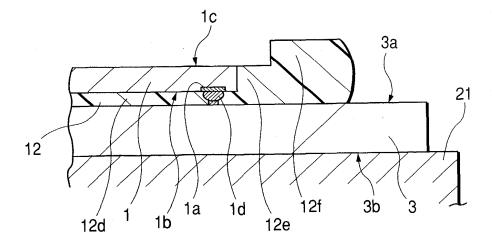


FIG. 41

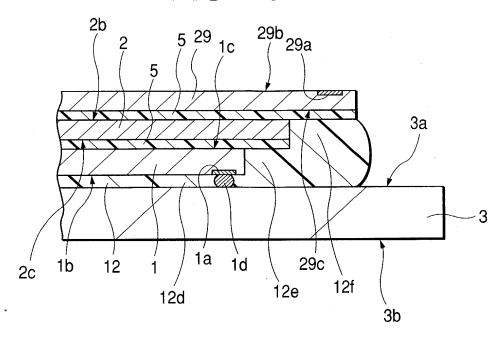
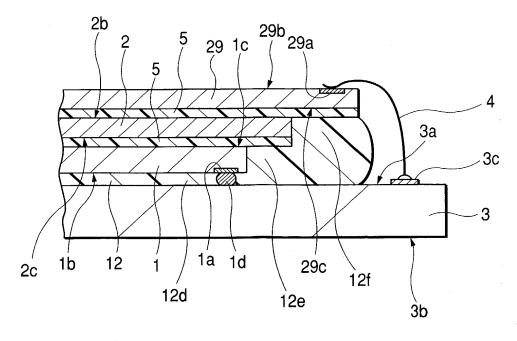


FIG. 42



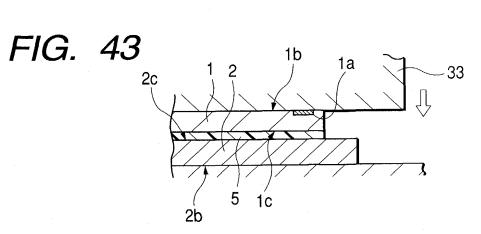


FIG. 44

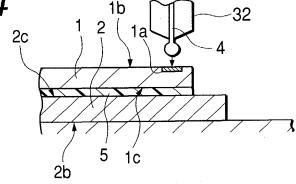
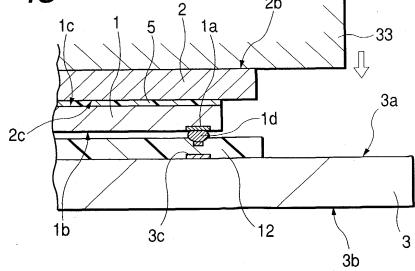


FIG. 45



35 / 39

FIG. 46

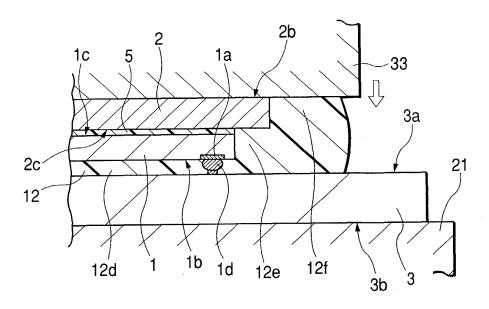


FIG. 47

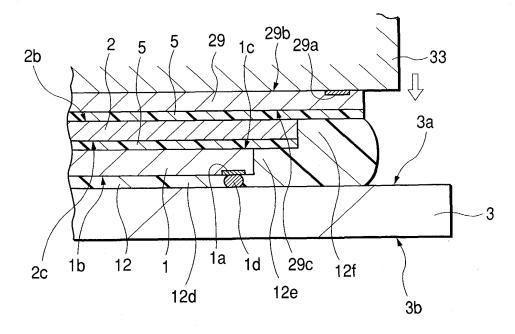


FIG. 48

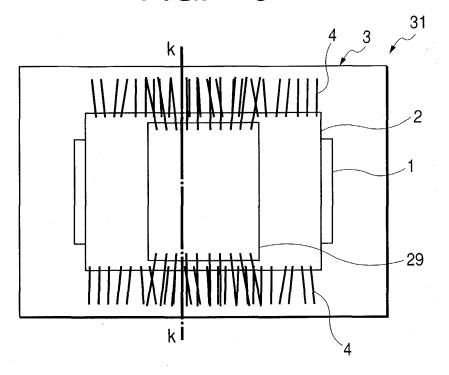


FIG. 49

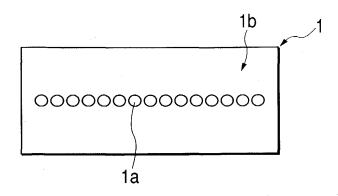


FIG. 50

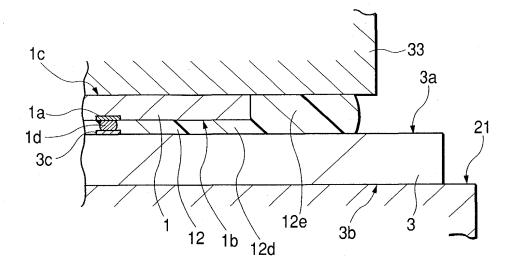


FIG. 51

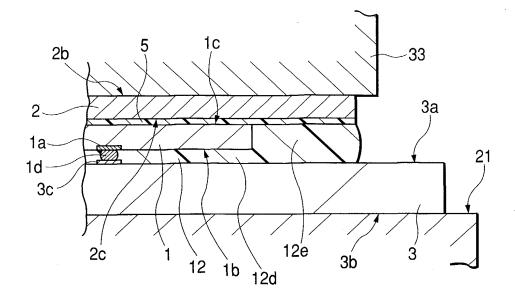


FIG. 52

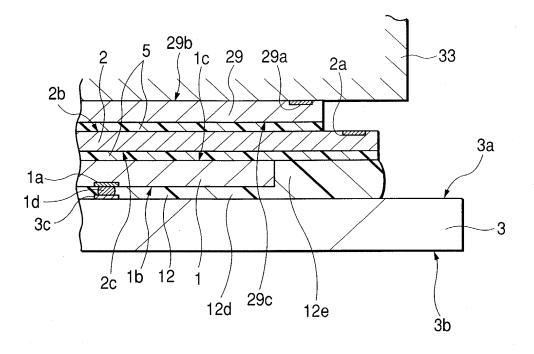


FIG. 53

